

ABSTRACT OF THE DISCLOSURE

Methods for controlling the voltage on a lens of an electron emitting device are provided. A representative method includes: supplying an emitter voltage to an electron emitter in the electron emitting device, wherein a current amplitude is established; sensing the emitter voltage on the electron emitter; supplying a non-inverted input voltage to an amplifier that follows the emitter voltage; and providing an amplifier output voltage from the amplifier to the lens, wherein the amplifier output voltage corresponds to the emitter voltage at the electron emitter. Systems, devices and other methods also are provided.